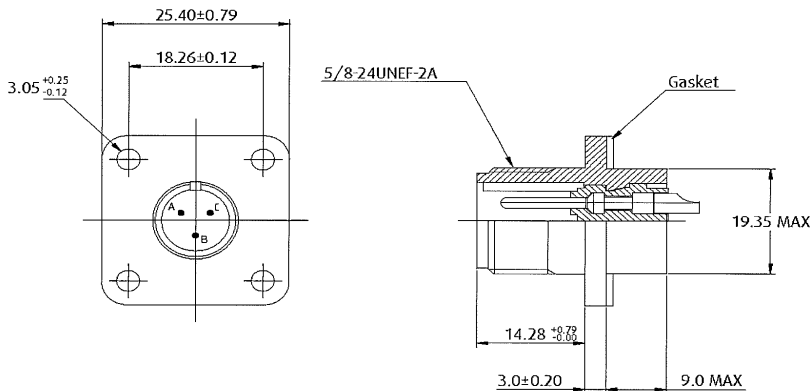


Customer Information Sheet

WING No.: M90-3102R10SL-3P	SHEET 2 OF 2	IF IN DOUBT - ASK	©	THIRD ANGLE PROJECTION	NOT TO SCALE	ALL DIMENSIONS IN mm
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SPECIFICATIONS:

MATERIAL:

SHELL = ALUMINIUM ALLOY
INSULATOR = POLYCHLOROPRENE
GROMMET = POLYCHLOROPRENE
CONTACT = COPPER ALLOY

FINISH:

SHELL = ZINC WITH BLACK CHROMATE COATING
CONTACT = SILVER

ELECTRICAL:

CURRENT RATING = 13 AMPS
VOLTAGE RATING = 500V AC, 700V DC
INSULATION RESISTANCE = 5,000 MΩ MIN

ENVIRONMENTAL:

TEMPERATURE RANGE = -55°C TO +125°C
VIBRATION = 10 - 500Hz (10G) PER MIL-STD-1344, Method 2005
SALT SPRAY = 48 HRS, 5% SALT SOLUTION, PER MIL-STD-1344 Method 1001
HUMIDITY = 95±3%, 71±2°C, 14 DAYS

MECHANICAL:

COUPLING : THREADED
POLARISATION : SINGLE KEY/ KEYWAY
CONTACT TYPE : SOLDER
CONTACT ARRANGEMENT : 3 CONTACTS
DURABILITY : 500 OPERATIONS

NOTES:

1. PRODUCT IS RoHS COMPLIANT
2. PRODUCT IS PACKED IN BAGS.
3. RECOMMENDED WIRE SIZE 16-22 AWG.

RA	3	15.01.09	10228
NAME	ISS.	DATE	C/NOTE
APPROVED			
CHECKED:			
DRAWN:			
CUSTOMER REF:			
ASSEMBLY DRG:			

HARWIN

HARWIN USA	HARWIN Europe (UK)	HARWIN Asia
TEL: 603 893 5376	TEL: 023 9231 4545	TEL: +65 6 779 4909
FAX: 603 893 5396	FAX: 023 9231 4590	FAX: +65 6 779 3868
EMAIL: sales@harwin.com	EMAIL: mis@harwin.co.uk	EMAIL: mis@harwin.com.sg

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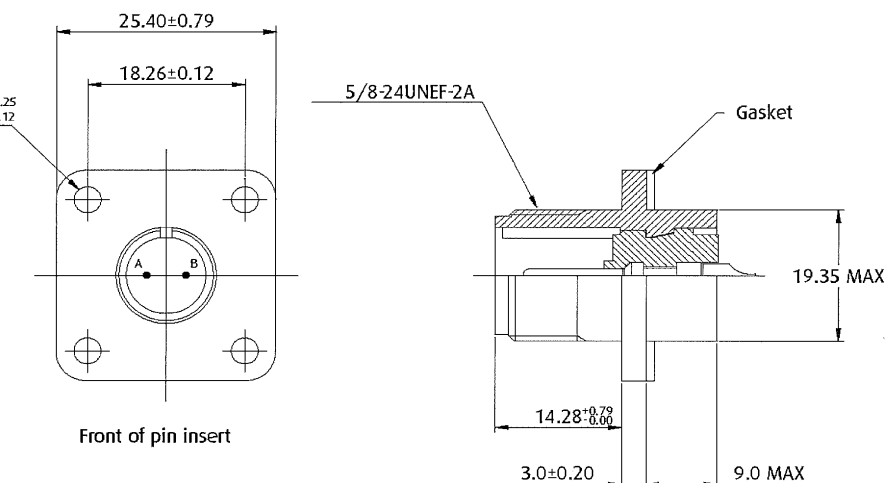
TOLERANCES
X. = ±1mm
X.X = ±0.25mm
X.XX = ±0.10mm
X.XXX = ±0.01mm
ANGLES = ±5°
UNLESS STATED

MATERIAL:
SEE ABOVE
FINISH:
SEE ABOVE
S/AREA:

TITLE:
PANEL MOUNT - 3 PIN CONTACTS
DRAWING NUMBER:
M90-3102R10SL-3P
SHT
2
OF
2

Customer Information Sheet

NG No.: M90-3102R10SL-4P SHEET 2 OF 2 IF IN DOUBT - ASK © THIRD ANGLE PROJECTION NOT TO SCALE ALL DIMENSIONS IN mm



NOTES:

1. PRODUCT IS RoHS COMPLIANT
2. PRODUCT IS PACKED IN BAGS
3. RECOMMENDED WIRE SIZE 16-22 AWG.

SPECIFICATIONS:

MATERIAL:

SHELL = ALUMINIUM ALLOY
INSULATOR = POLYCHLOROPRENE
GROMMET = POLYCHLOROPRENE
CONTACT = COPPER ALLOY

FINISH:

SHELL = ZINC WITH BLACK CHROMATE COATING
CONTACT = SILVER

ELECTRICAL:

CURRENT RATING = 13 AMPS
VOLTAGE RATING = 500V AC, 700V DC
INSULATION RESISTANCE = 5,000 MΩ MIN

ENVIRONMENTAL:

TEMPERATURE RANGE = -55°C TO +125°C
VIBRATION = 10 - 500Hz (10G) PER MIL-STD-1344, Method 2005
SALT SPRAY = 48 HRS, 5% SALT SOLUTION, PER MIL-STD-1344
Method 1001
HUMIDITY = 95±3%, 71±2°C, 14 DAYS

MECHANICAL:

COUPLING : THREADED
POLARISATION : SINGLE KEY/ KEYWAY
CONTACT TYPE : SOLDER
CONTACT ARRANGEMENT : 2 CONTACTS
DURABILITY : 500 OPERATIONS

RA	3	15.01.09	10228
NAME	ISS.	DATE	C/NOTE
APPROVED			
CHECKED:			
DRAWN:	M.G.PLESTED		
CUSTOMER REF:			
ASSEMBLY DRG:			

HARWIN

HARWIN USA 603 893 5376 603 893 5396 @harwin.com	HARWIN Europe (UK) TEL: 023 9231 4545 FAX: 023 9231 4590 mis@harwin.co.uk	HARWIN Asia TEL: +65 6 779 4909 FAX: +65 6 779 3868 mis@harwin.com.sg
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TOLERANCES
X. = ±1mm
X.X = ±0.25mm
X.XX = ±0.10mm
X.XXX = ±0.01mm
ANGLES = ±5°
UNLESS STATED

MATERIAL:
SEE ABOVE
FINISH:
SEE ABOVE
S/AREA:

TITLE:
PANEL MOUNT -
2 PIN CONTACTS

DRAWING NUMBER:	SHT
M90-3102R10SL-4P	2 OF 2

Customer Information Sheet

DRAWING No.: M90-3102R12S-3P

SHEET 2 OF 2

IF IN DOUBT - ASK

(C)

NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:

MATERIAL:

SHELL: ALUMINIUM ALLOY
INSULATOR: NITRILE BUTADIENE RUBBER
GROMMET: NITRILE BUTADIENE RUBBER
CONTACT COPPER ALLOY

FINISH:

SHELL: ZINC PLATED WITH BLACK CHROMATE COATING
CONTACT: SILVER

ELECTRICAL:

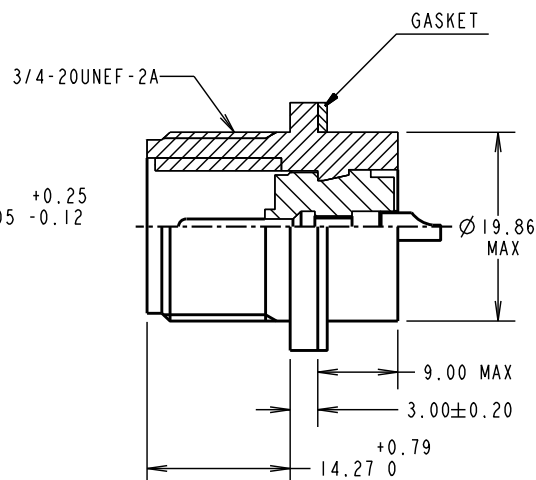
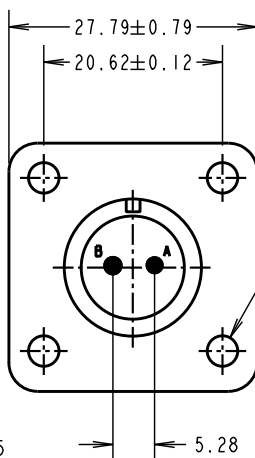
CURRENT RATING: 13 AMPS
VOLTAGE RATING: 500V AC, 700V DC
INSULATION RESISTANCE: 5,000 M Ω MIN

MECHANICAL:

COUPLING: THREADED
POLARISATION: SINGLE KEY/KEYWAY
CONTACT TYPE: SOLDER
CONTACT ARRANGEMENT: 2 CONTACTS
DURABILITY: 500 CYCLES

ENVIRONMENTAL:

TEMPERATURE RANGE: -55°C TO -125°C
VIBRATION: 10-500Hz (10G), PER MIL-STD-1344, METHOD 2005
SALT SPRAY: 48HRS. SALT SOLUTION 5%, PER MIL-1344, METHOD 1001
HUMIDITY: RELATIVE HUMIDITY 95 $\pm$ 3%, 71°C $\pm$ 2°C, 14 DAYS



NOTES:

1. PRODUCT IS RoHS COMPLIANT
2. PRODUCT IS PACKED IN BAGS.
3. RECOMMENDED WIRE SIZE 16-22 AWG.

RA	3	12.08.10	10900
NAME	ISS.	DATE	C/NOTE
APPROVED: R. ADDE			
CHECKED: M.G.PLESTED			
DRAWN: R. ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

HARWIN

HARWIN USA
TEL: 603 893 5376
FAX: 603 893 5396
mis@harwin.com

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TEL: 023 9231 4545
FAX: 023 9231 4590
mis@harwin.co.uk

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TEL: +65 6 779 4909
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mis@harwin.com.sg

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TOLERANCES

X. = ± 1 mm
X.X = ± 0.25 mm
X.XX = ± 0.10 mm
X.XXX = ± 0.01 mm
ANGLES = $\pm 5^\circ$
UNLESS STATED

MATERIAL:

SEE ABOVE

FINISH:

S/AREA:

mm²

TITLE:

CABLE CONNECTOR-
2 PIN CONTACTS

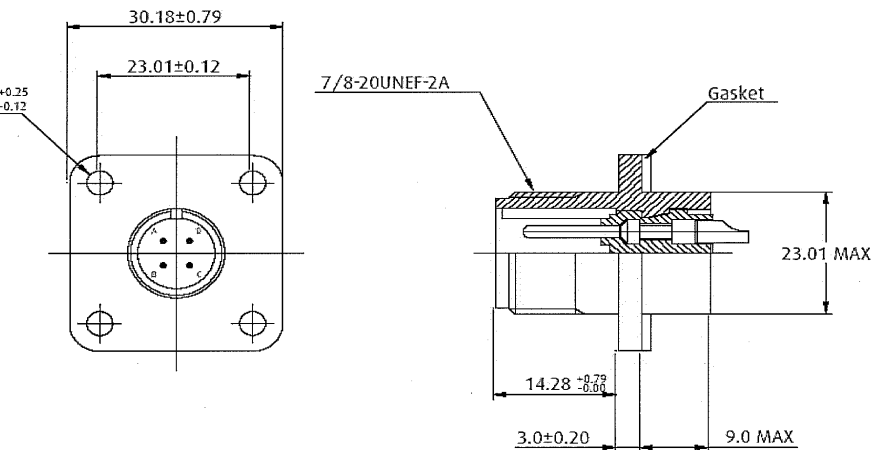
DRAWING NUMBER:

M90-3102R12S-3P

SHT
2
OF
2

Customer Information Sheet

WING No.: M90-3102R14S-2P	SHEET 2 OF 2	IF IN DOUBT - ASK	©	THIRD ANGLE PROJECTION	NOT TO SCALE	ALL DIMENSIONS IN mm
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NOTES:

1. PRODUCT IS RoHS COMPLIANT
2. PRODUCT IS PACKED IN BAGS
3. RECOMMENDED WIRE SIZE 16-22 AWG.

SPECIFICATIONS:

MATERIAL:

SHELL = ALUMINIUM ALLOY
INSULATOR = POLYCHLOROPRENE
GROMMET = POLYCHLOROPRENE
CONTACT = COPPER ALLOY

FINISH:

SHELL = ZINC WITH BLACK CHROMATE COATING
CONTACT = SILVER

ELECTRICAL:

CURRENT RATING = 13 AMPS
VOLTAGE RATING = 200V AC, 250V DC
INSULATION RESISTANCE = 5,000 MΩ MIN

ENVIRONMENTAL:

TEMPERATURE RANGE = -55°C TO +125°C
VIBRATION = 10 - 500Hz (10G) PER MIL-STD-1344, Method 2005
SALT SPRAY = 48 HRS, 5% SALT SOLUTION, PER MIL-STD-1344
Method 1001

HUMIDITY = 95±3%, 71±2°C, 14 DAYS

MECHANICAL:

COUPLING : THREADED
POLARISATION : SINGLE KEY/ KEYWAY
CONTACT TYPE : SOLDER
CONTACT ARRANGEMENT : 4 CONTACTS
DURABILITY : 500 OPERATIONS

RA	4	15.01.09	10228
NAME	ISS.	DATE	C/NOTE
APPROVED			
CHECKED:			
DRAWN:	M.G.PLESTED		
CUSTOMER REF:			
ASSEMBLY DRG:			

HARWIN

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TOLERANCES
X. = ±1mm
X.X = ±0.25mm
X.XX = ±0.10mm
X.XXX = ±0.01mm
ANGLES = ±5°
UNLESS STATED

MATERIAL:
SEE ABOVE
FINISH:
SEE ABOVE
S/AREA:

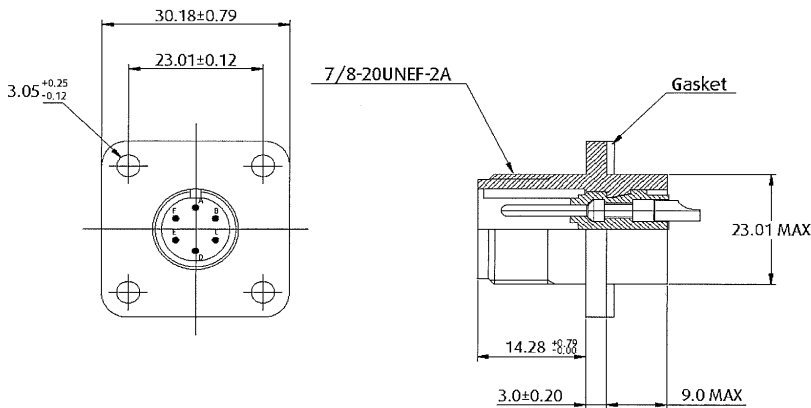
TITLE:
PANEL MOUNT -
4 PIN CONTACTS

DRAWING NUMBER:
M90-3102R14S-2P

SHT
2
OF
2

Customer Information Sheet

DWG No.: M90-3102R14S-6P SHEET 2 OF 2 IF IN DOUBT - ASK © THIRD ANGLE PROJECTION NOT TO SCALE ALL DIMENSIONS IN mm



SPECIFICATIONS:

MATERIAL:

SHELL = ALUMINIUM ALLOY
INSULATOR = POLYCHLOROPRENE
GROMMET = POLYCHLOROPRENE
CONTACT = COPPER ALLOY

FINISH:

SHELL = ZINC WITH BLACK CHROMATE COATING
CONTACT = SILVER

ELECTRICAL:

CURRENT RATING = 13 AMPS
VOLTAGE RATING = 200V AC, 250V DC
INSULATION RESISTANCE = 5,000 MΩ MIN

ENVIRONMENTAL:

TEMPERATURE RANGE = -55°C TO +125°C
VIBRATION = 10 - 500Hz (10G) PER MIL-STD-1344, Method 2005
SALT SPRAY = 48 HRS, 5% SALT SOLUTION, PER MIL-STD-1344

Method 1001

HUMIDITY = 95±3%, 71±2°C, 14 DAYS

MECHANICAL:

COUPLING : THREADED
POLARISATION : SINGLE KEY/ KEYWAY
CONTACT TYPE : SOLDER
CONTACT ARRANGEMENT : 6 CONTACTS
DURABILITY : 500 OPERATIONS

NOTES:

1. PRODUCT IS RoHS COMPLIANT
2. PRODUCT IS PACKED IN BAGS
3. RECOMMENDED WIRE SIZE 16-22 AWG.

RA	4	15.01.09	10228
NAME	ISS.	DATE	C/NOTE
APPROVED			
CHECKED:			
DRAWN:	M.G.PLESTED		
CUSTOMER REF:			
ASSEMBLY DRG:			

HARWIN

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FAX: 603 893 5396	FAX: 023 9231 4590	FAX: +65 6 779 3868
mis@harwin.com	mis@harwin.co.uk	mis@harwin.com.sg

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TOLERANCES
X = ±1mm
X.X = ±0.25mm
X.XX = ±0.10mm
X.XXX = ±0.01mm
ANGLES = ±5°
UNLESS STATED

MATERIAL:
SEE ABOVE
FINISH:
SEE ABOVE
S/AREA:

TITLE:
PANEL MOUNT -
6 PIN CONTACTS

DRAWING NUMBER:
M90-3102R14S-6P

SHT
2
OF
2